Claims

1. A process for producing phenol, said process comprising;

introducing cumene hydroperoxide into a feedstream comprising phenol, acetone and an acid catalyst to produce a phenol product from the cumene hydroperoxide, wherein a molar ratio of the phenol to the acetone is greater than 1:1.

2. The process of Claim 1, wherein the molar ratio of the phenol to the acetone is greater than or equal to 1.5:1.

3. The process of Claim 1, wherein the phenol product contains less than or equal to 400 parts per million of acetol based on the total weight of the phenol product.

4. The process of Claim 1, wherein the acid-catalyst is selected from the group consisting of mineral acids, strong organic acids, acidic clays, and acidic ion exchange resins.

5. The process of Claim 1, wherein said acid-catalyst is sulfuric acid.

6. The process of Claim 1, wherein the process is a batch mode or a continuous mode.

7. The process of Claim 1, wherein the cumene hydroperoxide contacts the feedstream for 30 seconds to 3 minutes.

8. The process of Claim 1, wherein the feedstream is maintained at a temperature of 50°C to 65°C.

9. The process of Claim 1, further comprising adding water to the feedstream, wherein the total quantity of water in said process is less than or equal to 5 weight percent based on the total weight of the cumene hydroperoxide, phenol, acetone, and acid catalyst.

10. A process for producing phenol, said process comprising;

introducing cumene hydroperoxide into a feed stream comprising phenol, acetone and an acid catalyst to produce a phenol product from the cumene hydroperoxide, wherein a molar ratio of the phenol to the acetone is greater than 1:1 and wherein the phenol product contains less than or equal to 400 parts per million of acetol based on the total weight of the phenol product.

11. A bisphenol prepared with the phenol product of Claim 1.

12. A polycarbonate prepared with the bisphenol product of Claim 11.